

Serial No.: 10/619,989

AUG 01 2006

LISTING OF THE CLAIMS

CLAIMS

We claim:

1. (Currently amended) An apparatus comprising:

a buffer for storing indications of interrupts generated by ports of a peripheral device, the peripheral device having a plurality of ports, said apparatus for transferring interrupts from the peripheral device to a host computer system, and

a controller for, in response to a preset condition being met, generating a control data block comprising a payload portion having a plurality of fields each corresponding to a port and a header portion having an identifier for identifying the control data block, moving the contents of the buffer to the payload portion of the control data block, and sending the control data block to the host computer system via one of the ports.

~~moving the contents of the buffer to the payload portion of the control data block.~~

2. (original) An apparatus as claimed in claim 1, wherein the preset condition comprises a determination that the buffer is full.

3. (original) An apparatus as claimed in claim 1, wherein the preset condition comprises a determination that at least a predetermined plurality of indications is stored in the buffer and that a predetermined period has elapsed.

4. (original) An apparatus as claimed in claim 1, wherein the preset condition comprises a determination that at least one indication is stored in the buffer and that a predetermined period has elapsed.

DOCKET NUMBER: IL20000078US1

4/30

Serial No.: 10/619,989

- 1 5. (Previously presented) An apparatus as claimed in claim 1, wherein the header portion
2 comprises a count indicative of the number of indications included in the payload portion.
- 3 6. (original) An apparatus as claimed in claim 1, wherein the header portion comprises a time of
4 day stamp.
- 5 7. (original) An apparatus as claimed in claim 1, wherein the buffer comprises a first in - first
6 out memory buffer.
- 7 8. (currently amended) A peripheral device comprising the apparatus as claimed in claim 1.
- 8 9. (currently amended) A data communications network interface comprising a the peripheral
9 device as claimed in claim 8.
- 10 10. (Previously presented) An apparatus as claimed in claim 1, further comprising:
11 a host processing system having a memory, a data communications interface for communicating
12 data between the host computer system and a data communications network, forming a data
13 processing system for controlling flow of interrupts from the data communication interface to the
14 memory of the host computer system.
- 15 11. (original) A method comprising transferring interrupts from a peripheral device to a host
16 computer system, the peripheral device having a plurality of ports, the step of transferring
17 interrupts comprising:
18 storing interrupts generated by ports of the peripheral device in a buffer;
19 determining if a preset condition is met, and, in response to the preset condition being met;

DOCKET NUMBER: IL20000078US1

5/30

Serial No.: 10/619,989

1 generating a control data block comprising a payload portion having a plurality of fields each
2 corresponding to a different one of the ports and a header portion having an identifier for
3 identifying the control data block;

4 moving the contents of the buffer to the corresponding fields of the payload portion; and

5 sending the control data block to the host computer system via one of the ports.

6 12. (original) A method as claimed in claim 11, wherein the step of determining if the preset
7 condition is met comprises determining if the buffer is full.

8 13. (original) A method as claimed in claim 11, wherein the step of determining if the preset
9 condition is met comprises determining if at least a predetermined plurality of indications is
10 stored in the buffer and if a predetermined period has elapsed.

11 14. (original) A method as claimed in claim 11, wherein the step of determining if the preset
12 condition is met comprises determining if at least one indication is stored in the buffer
13 and if a predetermined period has elapsed.

14 15. (original) A method as claimed in claim 11, wherein the header portion comprises a count
15 indicative of the number of indications included in the payload portion.

16 16. (original) A method as claimed in claim 11, wherein the buffer comprises a first in - first out
17 memory buffer.

18 17. (Currently amended) A computer program product comprising a computer usable medium
19 having computer readable program code means embodied therein for causing transfer of
20 interrupts, the computer readable program code means in said computer program product
21 comprising computer readable program code means for causing a computer to effect the
22 functions and of all the limitations elements of claim 1.

DOCKET NUMBER: IL20000078US1

6/30

Serial No.: 10/619,989

1 18. (Currently amended) A computer program product comprising a computer usable medium
2 having computer readable program code means embodied therein for causing data processing, the
3 computer readable program code means in said computer program product comprising computer
4 readable program code means for causing a computer to effect the functions ~~and of all the~~
5 ~~limitations elements~~ of claim 10.

6 19. (Currently amended) An article of manufacture comprising a computer usable medium
7 having computer readable program code means embodied therein for causing transfer of
8 interrupts, the computer readable program code means in said article of manufacture comprising
9 computer readable program code means for causing a computer to effect the steps and all the
10 limitations of the steps of claim 11.

11 20. (Currently amended) A program storage device readable by a machine, tangibly embodying a
12 program of instructions executable by the machine to perform method steps for transferring
13 interrupts, said method steps comprising the steps and all the limitations of the steps of claim 11

14 21. (New) An apparatus as claimed in claim 1, wherein:

15 the preset condition comprises at least one of:

16 a determination that the buffer is full,

17 a determination that at least a predetermined plurality of indications is stored in the buffer

18 and that a predetermined period has elapsed, and

19 determination that at least one indication is stored in the buffer and that a predetermined

20 period has elapsed;

21 the header portion comprises a count indicative of the number of indications included in the

22 payload portion;

23 the header portion comprises a time of day stamp; and

DOCKET NUMBER: IL20000078US1

7/30

Serial No.: 10/619,989

- 1 the buffer comprises a first in - first out memory buffer.
- 2 22. (New) An apparatus as claimed in claim 21, further comprising:
- 3 a host processing system having a memory, a data communications interface for communicating
- 4 data between the host computer system and a data communications network, forming a data
- 5 processing system for controlling flow of interrupts from the data communication interface to the
- 6 memory of the host computer system.

DOCKET NUMBER: IL20000078US1

8/30